

Ser. No. 10/731,201
Filed Dec. 10, 2003
Preliminary Amendment



REMARKS

The present amendment is made preliminary to the Examiner's examination of this application and reflects the Office Action mailed December 8, 2003 in the parent application (Ser. No. 10/409,719) of this application and a telephone interview on February 6, 2004 in connection with the parent application. By the present amendment all of the article claims have been canceled and rewritten to incorporate changes in language. One method claim has also been canceled and rewritten as a new claim. The total number of claims, as well as the number of independent claims is unchanged.

The primary reference relied upon in the parent application is #5,007,222 - Raymond, which referenced was discussed in detail in the referenced interview.

A point which is believed to be central to a discussion of Raymond is that the "foam core panels" claimed in the present application are commercial items having a recognized configuration or makeup. More specifically they are extremely lightweight, non structural components that have a measure of rigidity. A primary function of foam core panels is to provide the appearance or visual affect of solid objects, as they find widespread application in the form of room dividers, valances, soffits and other forms in which they simulate structural elements. A foam core panel by definition comprises, as a minimum, a slab of foamed plastic material (typically foamed polystyrene) having opposed lateral surfaces spaced apart by the thickness of the slab, and sheet material (herein termed veneer) bonded to these lateral surfaces. A foam core panel may also comprise wooden (solid plastic would

be equivalent) rails bonded to one or more of the side edges (extending between the lateral surfaces) of the foam slab. The sheet material is coextensive with the lateral surfaces of the panel so that from at least one direction, the foam core panel gives the visual appearance of a solid object.

Raymond simply does not disclose a "foam core panel", as understood by one skilled in the art, pursuant to the foregoing definition of that term. Instead, Raymond teaches a "wall member 12" (also referenced as a "wall panel") consisting of a plurality of foamed plastic slabs (not identified by a reference character) on opposite sides of a vertical support column (hollow stud) 20, formed of solid plastic. The vertical, lateral side edges of the "wall members 12 are then defined by support columns 120, bonded to the foam slabs. The "wall member 12" thus consists of only the foam slabs and the support columns 20 and 120.

The Examiner asserts that the plywood sheets (15) of Raymond respond to the veneers set forth in applicants' claims to "foam core panels", but that position is not well taken. Two distinctions of substance are found. First, the plywood sheets of Raymond are applied to his wall panels 12 after they have been joined to form a modular wall section 10. This, in turn, points up the fact that the plywood sheets 15 are not coextensive with the lateral surfaces or the wall panels 12. This point is further evidenced by Fig. 4 of Raymond. Again, Raymond does not disclose a foam core panel as specified in the claims and as recognized by those skilled in the art, nor is the wall panel 12 converted into a "foam core panel" after its incorporation into a building structure.

Pursuing this distinction further, reference is made to claim 35 (a rewritten version of

original claim 3) wherein it is specified that the foam core panels comprise top and bottom rails. The Examiner has attempted to read the claimed foam panel rails on the base stud 58 and top stud 78 of Raymond. This position is not tenable in light of the fact that Raymond specifically teaches that the top and bottom surfaces of his wall panel 12 are defined by planar surfaces 52, 54 (col. 5, lines 19-21). Claim 35 further recites that the top and bottom rails are coextensive with the top and bottom surfaces of the foam slab. Claim 35 and other claims wherein the provision of rails as a component of the defined foam core panel are thus distinguished from Raymond.

A further and even more significant distinction over Raymond is found in the means whereby adjacent panels are joined.

Applicants had previously made the point that Raymond did not teach the mechanism by which an attachment, (or bonding) was made between Raymond's foam slabs and the support columns 20, 120. The Examiner indicated that such teaching was found at col. 4, lines 43-45, but that portion of the disclosure simply states that they are "disposed within" the panel – nothing is said about an attachment mechanism. A further review of Raymond identified col. 3, lines 1-4, as teaching that the foamed plastic "is molded around" the support columns. This then is the mechanism whereby an attachment is made with the foam slab.

The problem which is solved by the present invention is in providing a simplified manner of joining foam core panels and in doing so in a way that provides a tight connection, to the end that any gap between the joined panels is minimize, if not eliminated, so

that the joined panels give the appearance of a single, solid object.

A fundamental predicate to the broader aspects of Applicants' invention is found in the joining of such panels in a manner such that, through the provision of undercut slots, the foam material itself is a utilitarian (or active) component of the joining mechanism.

The Examiner's attention is directed to claim 33 (presented herewith) where this joining mechanism, employing an undercut slot in the foam slab, is defined in lines 13-19. This language clearly distinguishes Raymond, where the solid, structural rails 120 are bonded to the foamed slabs (during the molding process) and then the panels 12 are joined by the insert 142 as shown in Fig. 3 or Fig. 8.

It is believed that the Examiner now understands that Raymond does not employ an undercut slot in his foam slab as part of a joining mechanism and would not respond to this claim language.

In rewriting claim 1 as claim 33, language used in the foregoing description of "foam core panels" has been incorporated, such language being deemed as providing a more precise definition. Claim 33 also revises claim 1 to take into account the Examiner's comments regarding the meaning and definition of "abutting". It is believed that claim 33 clearly avoids any reading in terms on Raymond.

Method claim 17 (from the parent application) is now presented as claim 51, wherein the basic method steps are believed to be more accurately defined. Suffice it to say that the Examiner's position that claimed steps would be obvious from Raymond finds no basis in fact. Raymond in fact does form a groove (which is not undercut) in his unnumbered

foam slab when the plastic is molded around the plastic support member 120 (col. 3, lines 1-4). And in so doing bonds the plastic support member to the foamed slab. Thus there is would be no reason for Raymond to separately provide a liner and then adhering it to the under cut slot in the manner claimed. The modification proposed by the Examiner finds its origin solely in the hindsight of applicant's teaching.

The substance of claims 7, 10 and 16, previously rejected on Raymond in view of Sipe, is now presented as claims 39, 43 and 41. Claim 43 further distinguishes the teachings of Sipe in that the defined camming surface is effective when the joining member is slid lengthwise into the undercut slots. This is in contrast to Sipe's joining members which are not slidable lengthwise of his slots. Claim 41 further distinguishes Sipe in defining the slot configuration seen in Fig. 6. Sipe's does not deal with angled members, let alone suggesting the claimed slot configuration.

The rejection of claims 13, 14 (now claims 48, 49) rejected on Raymond in view of Coutu is traversed in that that reference simply illustrates the use of two splines, not joining members. The actual joining members are the screws that are threaded into the splines. In any event, nothing in Coutu would teach a modification of Raymond in a manner responding to the limitations of these claims.

In regard to the claims going to the provision of a miterred, angled connection between angled panels, it will be noted that Raymond does not show a miterred corner connection, that is, one where the two, connected panels are beveled. The Examiner's interpretation of what constitutes a miterred connection is respectfully submitted to be in

error. If the angle, as proposed by the Examiner is to be 180 deg. then there panels are aligned and there is, in fact no angle (see dictionary definition of angle.

More importantly, Raymond fails to show a miterred connection of any type. Rather, Raymond teaches the use of a corner column 156, to which the angled wall portions 10 are separately connected. See Raymond's Fig. 4.

The rejection revolving around what would constitute "intermediate" the length of a panel is believed overcome by the introduction of the term lateral surface.

The Examiner's position that the failure to state in claim 5 (now claim 37) "what means" allows Raymond to be interpreted as teaching that his base and top rails have a means for connecting the panels to an overhead support, defies logic. In the first place it is elemental that means plus function is a proper claim element. Thus the claim element "means are provided in at least one of said top rails for connecting the panels to an overhead support" is sufficient in and of itself. There is no lacking as to "what" means and no justification for the Examiner's attempt to make something from Raymond that is not there. Further there is nothing in Raymond that provides an overhead support for his wall panel 12.

It is believed that the newly presented claims will be found to distinguish the prior

An early and favorable action on the claims now present, in light of the foregoing



remarks is respectfully requested.

Respectfully requested,

A handwritten signature in black ink, appearing to read "Edmund S. Lee III".

Edmund S. Lee III, Agent for Applicants
104 Fieldstone Dr.
Terrace Park, Ohio 45174

(513) 831-2494

CERTIFICATE OF MAILING

I hereby certify that the foregoing and accompanying, separate Claim Amendments were deposited with the United States Postal Service, prepaid first class mail, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on March 4, 2004.

A handwritten signature in black ink, appearing to read "Edmund S. Lee III".

Edmund S. Lee III